

REMARKS

Entry of the foregoing and examination of the above-identified application is respectfully requested. Claims 10 and 17-19 have been canceled in view of the restriction requirement stated at pages 2-5 of the Office Action mailed September 12, 2000. Claims 5, 6, 9, 14-16, 21-30 and 44-59 have been amended to overcome the rejections under 35 USC §101 and §112. No new matter has been added by this amendment.

Claims 5, 6, 14-16 and 21 are rejected under 35 U.S.C. §101 because the claims are allegedly directed to non-statutory subject matter. This rejection has been rendered moot by the instant amendment. The claims have been amended to recite that the DNA or protease is "isolated." Withdrawal of this rejection is respectfully requested and believed to be in order.

Claims 5-9, 12, 14-16 and 26-59 have been rejected under 35 U.S.C. §112, first paragraph, as allegedly not being described by the specification. This rejection has been rendered moot by the instant amendment. The claims have been amended to delete the recitation of a "partial peptide." Withdrawal of this rejection is respectfully requested and believed to be in order.

Claims 5-10, 12, 14-19 and 21-59 remain rejected under 35 U.S.C. §112, first paragraph, because the specification allegedly fails to enable the invention as claimed. This rejection has been rendered moot by the instant amendment. The claims have been amended to delete recitations of partial peptides altered by substitution, deletion and/or addition of amino acid(s). The recitation of "breeding" has also been deleted from the

claims. Withdrawal of this rejection is thus respectfully requested and believed to be in order.

Claims 5-9, 12, 14-16 and 21-59 have also been rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite. The ambiguity allegedly results from the recitation of "partial peptide" in the claims. This rejection is now moot in view of the deletion of that recitation in the claims. Claim 24 is allegedly indefinite for a misspelling. This has been corrected in the instant amendment. Claims 14-16, 28-30 and 44-59 are allegedly indefinite for the recitation of "the domain or their partial peptides." This aspect of the rejection is rendered moot by the deletion of the phrase "or their partial peptides."

Withdrawal of this rejection of the claims is thus respectfully requested and believed to be in order.

Claims 5-9, 12, 14-16, 21-24 and 28-43 have been rejected under 35 U.S.C. §102(a) as allegedly being anticipated by Gschwend et al. Claims 5-9, 12, 14-16, 21-24 and 28-43 have been rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Au-Young et al. Claims 5-9, 12, 14, 21, 22, 28, 31, 34, 37 and 41 have been rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Fujikawa et al. Claims 5-9, 12, 15, 21, 29, 32, 35, 38 and 42 have been rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Wood et al. Claims 5-9, 12, 15, 21, 29, 32, 35, 38 and 42 have been rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Anderson et al. Claims 5-9, 12, 15, 21, 24 and 30 have been rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Elshourbagy et al (U.S. Patent No. 5,916,766). Claims 5-9, 12, 15, 21, 24,

30, 33, 36, 39 and 43 have been rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Krieger et al (U.S. Patent No. 5,510,466). Claims 5-9, 12, 15, 21, 24, 30, 33, 36, 39 and 43 have been rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Krieger et al (U.S. Patent No. 5,624,904). Claims 5-9, 12, 15, 21, 24, 30, 33, 36, 39 and 43 have been rejected under 35 U.S.C. §102(e) as allegedly being anticipated by Koths et al. Claims 25-27 and 44-59 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Gschwend et al in view of Au-Young et al. These rejections are believed to be rendered moot by the instant amendments.

At the bottom of page 8, the Examiner notes that limiting claims 5-10, 12, 14-19 and 21-59 as suggested to overcome the §112 rejections will obviate the prior art rejections. Since the claims have been amended as helpfully suggested by the Examiner, these prior art rejections are believed to have been rendered moot. Withdrawal of the rejections is thus respectfully requested and believed to be in order.

Further and favorable action in the form of a Notice of Allowance is respectfully requested.

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Attorney's Docket No. 001560-349

In the event that there are any questions relating to this amendment or the application in general, it would be appreciated if the Examiner would contact the undersigned attorney by telephone at 508-339-3684 so that prosecution would be expedited.

Respectfully submitted,

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Attachment to Reply and Amendment dated November 30, 2001

Marked-up Claims 5, 6, 9, 14-16, 21-30 and 44-59

5. (Three Times Amended) An isolated DNA which codes for the serine protease[,]
or domain, [or their partial peptides] as claimed in claim 21.

6. (Three Times Amended) An isolated DNA which codes for a peptide having serine protease[,]
or domain [or their partial peptide] activity, and is hybridizable with DNA that codes for the serine protease[,]
or domain, [or their partial peptides] as claimed in claim 21 under stringent conditions.

9. (Twice Amended) A process for preparing serine protease[,]
or domain [or their partial peptides] comprising culturing [or breeding] a [non-human] host cell as claimed in claim 8, and recovering serine protease[,]
or domain [or their partial peptides].

14. (Twice Amended) An isolated DNA which codes for the serine protease[,]
or domain [or their partial peptides] as claimed in claim 22.

15. (Twice Amended) An isolated DNA which codes for the serine protease[,]
or domain [or their partial peptide] as claimed in claim 23.

16. (Twice Amended) An isolated DNA which codes for the serine protease[,]
or domain [or their partial peptide] as claimed in claim 24.

21. (Amended) An isolated [A] serine protease [or its partial peptide] consisting of [an amino acid sequence selected from the group consisting of:] the amino acid sequence indicated in SEQ ID NO: 6[; an amino acid sequence wherein at least one amino acid residue in an amino acid sequence shown in SEQ ID NO: 6 is deleted; an amino acid sequence wherein at least one amino acid residue in amino acid sequence shown in SEQ ID NO: 6 is substituted with at least one other amino acid; an amino acid sequence wherein at least one amino acid is added to the amino acid sequence shown in SEQ ID NO: 6; and an amino acid sequence including a combination of said amino acid modifications].

22. (Amended) A serine protease domain [or its partial peptide] consisting of an amino acid sequence [selected from the group consisting of: the amino acid sequence] from amino acid No. 578 to 822 indicated in SEQ ID NO: 6[; an amino acid sequence wherein at least one amino acid residue in an amino acid sequence from amino acid No. 578 to 822 indicated in SEQ ID NO: 6 is deleted; an amino acid sequence wherein at least one amino acid residue in an amino acid sequence from amino acid No. 578 to 822 indicated in SEQ ID NO: 6 is substituted with at least one other amino acid; an amino acid sequence wherein at least one amino acid is added to the amino acid sequence shown in

SEQ ID NO: 6; and an amino acid sequence including a combination of said amino acid modifications].

23. (Amended) A kringle domain [or its partial peptide] consisting of an [amino acid sequence selected from the group consisting of: the] amino acid sequence from amino acid No. 40 to 112 indicated in SEQ ID NO: 6[; an amino acid sequence wherein at least one amino acid residue in an amino acid sequence from amino acid No. 40 to 112 indicated in SEQ ID NO: 6 is deleted; an amino acid sequence wherein at least one amino acid residue in an amino acid sequence from amino acid No. 40 to 112 indicated in SEQ ID NO: 6 is substituted with at least one other amino acid; an amino acid sequence wherein at least one amino acid is added to the amino acid sequence shown in SEQ ID NO: 6; and an amino acid sequence including a combination of said amino acid modifications].

24. (Amended) A scavenger receptor cysteine-rich [cystein-rich] (SRCR) domain [or its partial peptide] consisting of an amino acid sequence selected from the group consisting of: the amino acid sequence from amino acid No. 117 to 217, from amino acid No. 227 to 327, from amino acid No. 334 to 433, or from amino acid No. 447 to 547 indicated in SEQ ID NO: 6[; an amino acid sequence wherein at least one amino acid residue in an amino acid sequence from amino acid No. 117 to 217, from amino acid No. 227 to 327, from amino acid No. 334 to 433, or from amino acid No. 447 to 547 indicated in SEQ ID NO: 6 is substituted with at least one other amino acid; an amino acid sequence

wherein at least one amino acid is added to the amino acid sequence shown in SEQ ID NO: 6; and an amino acid sequence including a combination of said amino acid modifications].

25. (Amended) A process for screening physiologically active substances comprising the steps of measuring inhibitory or activating activity of the substances using the serine protease [or their partial peptides] as claimed in claim 21, or measuring binding affinity of the substances to the serine protease or domain as claimed in claim 21.

26. (Amended) A process for screening physiologically active substances comprising the steps of measuring inhibitory or activating activity of the substance using the serine protease [or their partial peptides] as claimed in claim 21, or measuring binding affinity of the substance to the serine protease [or their partial peptides] as claimed in claim 21, that is prepared by using a DNA which codes for the serine protease[,] or domain [or their partial peptides] as claimed in claim 21.

27. (Amended) A process for screening physiologically active substances comprising the steps of measuring inhibitory or activating activity of the substance using the serine protease [or their partial peptides] as claimed in claim 21, or measuring binding affinity of the substance to the serine protease [or their partial peptides] as claimed in claim 21, that is prepared by using a DNA which codes for a peptide having serine protease[,] or domain [or their partial peptide] activity, and is hybridizable with DNA that codes for the

serine protease[,] or domain [or their partial peptides] as claimed in claim 21 under stringent conditions.

28. (Amended) An isolated DNA which codes for a peptide having domain [or their partial peptide] activity, and is hybridizable with DNA that codes for the domain [or their partial peptides] as claimed in claim 22, under stringent conditions.

29. (Amended) An isolated DNA which codes for a peptide having domain [or their partial peptide] activity, and is hybridizable with DNA that codes for the domain [or their partial peptides] as claimed in claim 23, under stringent conditions.

30. (Amended) An isolated DNA which codes for a peptide having domain [or their partial peptide] activity, and is hybridizable with DNA that codes for the domain [or their partial peptides] as claimed in claim 24, under stringent conditions.

44. (Amended) A process for preparing domain [or their partial peptides] comprising culturing [or breeding] a [non-human] host cell as claimed in claim 37, and recovering domain or their partial peptides.

45. (Amended) A process for preparing domain [or their partial peptides] comprising culturing [or breeding] a [non-human] host cell as claimed in claim 38, and recovering domain [or their partial peptides].

46. (Amended) A process for preparing domain [or their partial peptides] comprising culturing [or breeding] a [non-human] host cell as claimed in claim 39, and recovering domain [or their partial peptides].

47. (Amended) A process for preparing serine protease [or their partial peptides] comprising culturing [or breeding] a [non-human] host cell as claimed in claim 40, and recovering serine protease [or their partial peptides].

48. (Amended) A process for preparing domain [or their partial peptides] comprising culturing [or breeding] a [non-human] host cell as claimed in claim 41, and recovering domain [or their partial peptides].

49. (Amended) A process for preparing domain [or their partial peptides] comprising culturing [or breeding] a [non-human] host cell as claimed in claim 42, and recovering domain [or their partial peptides].

50. (Amended) A process for preparing domain [or their partial peptides] comprising culturing [or breeding] a [non-human] host cell as claimed in claim 43, and recovering domain [or their partial peptides].

51. (Amended) A process for screening physiologically active substances comprising the steps of measuring inhibitory or activating activity of the substance using the domain [or their partial peptides] as claimed in claim 22, or measuring binding affinity of the substance to the domain [or their partial peptides] as claimed in claim 22.

52. (Amended) A process for screening physiologically active substances comprising the steps of measuring inhibitory or activating activity of the substance using the domain [or their partial peptides] as claimed in claim 23, or measuring binding affinity of the substance to the domain [or their partial peptides] as claimed in claim 23.

53. (Amended) A process for screening physiologically active substances comprising the steps of measuring inhibitory or activating activity of the substance using the domain [or their partial peptides] as claimed in claim 24, or measuring binding affinity of the substance to the domain [or their partial peptides] as claimed in claim 24.

54. (Amended) A process for screening physiologically active substances comprising the steps of measuring inhibitory or activating activity of the substance using

the domain [or their partial peptides] as claimed in claim 22, or measuring binding affinity of the substance to the domain [or their partial peptides] as claimed in claim 22, that prepared by using the DNA which codes for the serine protease[,] or domain [or their partial peptides] as claimed in claim 22.

55. (Amended) A process for screening physiologically active substances comprising the steps of measuring inhibitory or activating activity of the substance using the domain [or their partial peptides] as claimed in claim 23, or measuring binding affinity of the substance to the domain [or their partial peptides] as claimed in claim 23, that prepared by using the DNA which codes for the serine protease[,] or domain [or their partial peptide] as claimed in claim 23.

56. (Amended) A process for screening physiologically active substances comprising the steps of measuring inhibitory or activating activity of the substance using the domain [or their partial peptides] as claimed in claim 24, or measuring binding affinity of the substance to the domain [or their partial peptides] as claimed in claim 24, that prepared by using the DNA which codes for the serine protease[,] or domain [or their partial peptide] as claimed in claim 24.

57. (Amended) A process for screening physiologically active substances comprising the steps of measuring inhibitory or activating activity of the substance using

the domain [or their partial peptides] as claimed in claim 22, or measuring binding affinity of the substance to the domain [or their partial peptides] as claimed in claim 22, that prepared by using the DNA which codes for a peptide having domain [or their partial peptide] activity, and is hybridizable with DNA that codes for the domain [or their partial peptides] as claimed in claim 22, under stringent conditions.

58. (Amended) A process for screening physiologically active substances comprising the steps of measuring inhibitory or activating activity of the substance using the domain [or their partial peptides] as claimed in claim 23, or measuring binding affinity of the substance to the domain [or their partial peptides] as claimed in claim 23, that prepared by using the DNA which codes for a peptide having domain [or their partial peptide] activity, and is hybridizable with DNA that codes for the domain [or their partial peptides] as claimed in claim 23, under stringent conditions.

59. (Amended) A process for screening physiologically active substances comprising the steps of measuring inhibitory or activating activity of the substance using the domain [or their partial peptides] as claimed in claim 24, or measuring binding affinity of the substance to the domain [or their partial peptides] as claimed in claim 24, that prepared by using the DNA which codes for a peptide having domain [or their partial peptide] activity, and is hybridizable with DNA that codes for the domain [or their partial peptides] as claimed in claim 24, under stringent conditions.